

Flush diaphragm pressure gauge For food, bio and pharmaceutical industries Model 432.55, stainless steel version

WIKA data sheet PM 04.09



Applications

- Quick connections for direct, fast installation and removal
- Quick cleaning of measuring point, without residue, autoclavable (sterilisable)
- For gaseous and liquid aggressive media that are highly viscous or crystallising, also in aggressive ambience
- Process industry: Biochemical industry, paints and dyes sector, sanitary applications, pharmaceutical industry, food industry

Special features

- Dry measuring cell, no transmission fluid
- Flush, welded diaphragm
- Suitable for SIP and CIP
- Wetted parts and enclosing metallic components from stainless steel
- Scale ranges from 0 ... 0.6 bar to -1 ... 7 bar

Description

The model 432.55 pressure gauge was designed as an addition to WIKA's standard range of products in order to meet the special demands made on process connections in the food, bio and pharmaceutical industries as well as in the paints and dyes sector.

All wetted parts are from stainless steel and fully welded.

Due to the design of the gauge it is possible to use an absolutely dry measuring cell, thus excluding a contamination of the medium with transmission fluids that may occur on diaphragm seal systems in the case of a damage to the diaphragm.

Design

EN 837-3

Nominal size in mm

100, 160



Flush diaphragm pressure gauge model 432.55

Accuracy class

1.6

Scale ranges

0 ... 0.6 to 0 ... 7 bar
or all other equivalent vacuum or combined pressure and vacuum ranges

Pressure limitation

Steady: Full scale value
Fluctuating: 0.9 x full scale value
Short time: 1.5 x full scale value

Permissible temperature

Ambient: -20 ... +60 °C
Medium: +150 °C maximum

Temperature effect

When the temperature of the measuring system deviates from the reference temperature (+20 °C):
Max. ±0.8 %/10 K of full scale value

Ingress protection

IP 54 per EN 60529 / IEC 529

Standard version

Process connection

Stainless steel 1.4435, 2" Tri-clamp per DIN 32676 for pipes per DIN 11866 row C or ASME BPE, lower mount (LM)

Pressure element

Diaphragm element, welded to the process connection, stainless steel 1.4435

Movement

Stainless steel

Dial

Aluminium, white, black lettering

Pointer

Aluminium, black

Case

Stainless steel

Window

Laminated safety glass

Bezel ring

Cam ring (bayonet type), stainless steel

Options

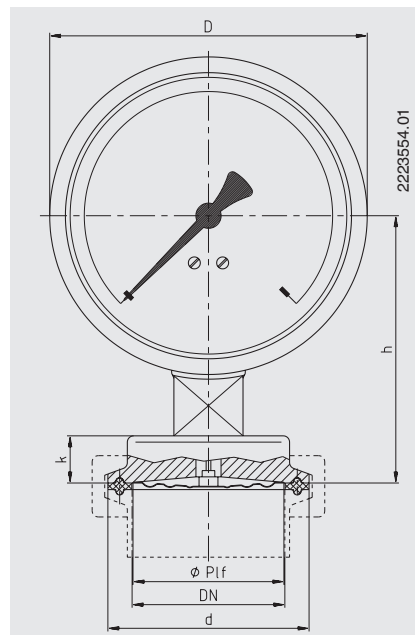
- Other process connection, e.g.:
 - Female union nut and threaded coupling DIN 11851
 - Female union nut and threaded coupling SMS
 - Female union nut and threaded coupling IDF
 - Female union nut and threaded coupling APV-RJT (from DN 50 or 2")
 - Clamp per DIN 32676 for pipes per DIN 11850 (from 2 1/2")
- Wetted parts and enclosing metallic components electropolished
- Wetted parts electropolished
- Higher overpressure safety
- Connection location at 3, 9 or 12 o'clock
- Switch contacts (data sheet AC 08.01)

Dimensions in mm

Standard version

Process connection Tri-clamp per DIN 32676 for pipes per DIN 11866 row C or ASME BPE

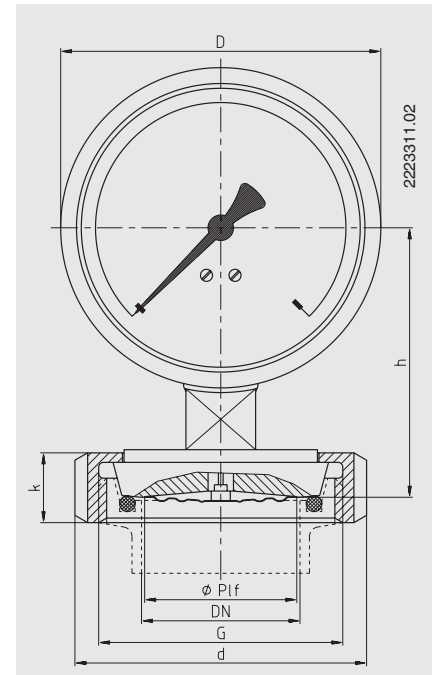
Process connection	DN	Dimensions in mm					Weight in kg
		D	h	Ø P1f	d	k	
Tri-clamp	2"	100	85	48	64	15	0.65
		160	115				1.05
	2 1/2" (option)	100	85		77.5	15	0.85
		160	115				1.25
	3" (option)	100	85		91	15	1.20
		160	115				1.60



Option

Process connection with female union nut

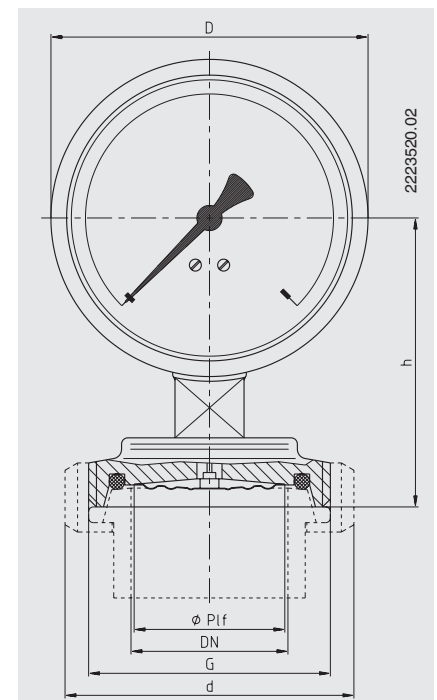
Process connection	DN	Dimensions in mm				G	d	k	Weight in kg
		D	h	Ø P1f	G				
DIN 11851	50	100	85	48	Rd 78 x 1/6	92	22	0.70	
		160	115					1.10	
	80	100	92		Rd 110 x 1/4	127	29	1.15	
		160	122					1.55	
SMS standard	2"	100	90	Rd 70 x 1/6	84	26	0.80		
		160	120				1.20		
IDF standard	2"	100	92	2" IDF	79	30	0.75		
		160	122				1.15		
APV-RJT standard	2"	100	85	2 7/8 x 6"	86	22	0.75		
		160	115				1.15		



Option

Process connection with threaded coupling

Process connection	DN	Dimensions in mm				G	d	Weight in kg
		D	h	Ø P1f	G			
DIN 11851	50	100	92	48	Rd 78 x 1/6	92	0.8	
		160	122				1.2	
SMS standard	2"	100	98		Rd 70 x 1/6	84	0.9	
		160	128				1.3	
IDF standard	2"	100	98	2" IDF	79	0.8		
		160	128			1.2		
APV-RJT standard	2"	100	92	2 7/8 x 6"	86	1.0		
		160	122			1.4		



Ordering information

Model / Nominal size / Scale range / Process connection (standard, size) / Options

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